

Table 3-33: Emissions of HFCs and PFCs from ODS Substitution (Tg CO₂ Eq.)

Gas	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
HFC-23	+	+	+	+	+	0.1	0.2	0.2	0.3	0.4	0.5
HFC-32	+	+	+	+	+	+	+	+	+	+	0.1
HFC-125	+	+	0.7	1.3	0.8	1.3	1.9	2.5	3.1	3.6	4.4
HFC-134a	0.7	0.7	0.8	3.8	5.8	15.9	21.1	26.2	30.0	33.9	37.6
HFC-143a	+	+	+	+	0.2	0.4	0.8	1.3	1.9	2.6	3.4
HFC-236fa	+	+	+	+	+	+	+	0.1	0.8	1.3	1.9
CF ₄	+	+	+	+	+	+	+	+	+	+	+
Others*	0.2	0.1	+	0.1	1.6	4.1	6.7	7.7	8.8	9.4	10.0
Total	0.9	0.8	1.5	5.2	8.4	21.8	30.6	38.0	44.9	51.3	57.8

+ Does not exceed 0.05 Tg CO₂ Eq.

* Others include HFC-152a, HFC-227ea, HFC-4310mee, and PFC/PFPEs, the latter being a proxy for a diverse collection of PFCs and perfluoropolyethers (PFPEs) employed for solvent applications. For estimating purposes, the GWP value used for PFC/PFPEs was based upon C₆F₁₄.

Note: Totals may not sum due to independent rounding.